



JSC TRAVELING EXHIBITS

INTERNATIONAL SPACE STATION TRAILERS

STAFFING HANDBOOK



START-UP PROCEDURE

- Step 1)** Make sure power is on to the trailers at the power source.
- Step 2)** Unlock and open the Hab trailer door at the top of the entrance platform. Secure in doorstop mechanism. Make sure not to drag chain at bottom of door across platform.
- Step 3)** Enter the pre-show area and retrieve the flashlight from beside the door. This flashlight should be left at the door following every event day.
- Step 4)** Power up the first trailer (Hab) by switching on the breakers located in the cabinet on the right wall of the Connecting Node at the far end of the Habitation Module (Hab). The sequence for the trailer power up is as follows:
- Make sure all of the individual breakers are in the "Off" position.
 - Switch the Main Breaker to the "On" position.
 - Switch each individual breaker to the "On" position.
- Step 5)** Power up the air conditioner by turning on the thermostat located at the upper left front corner of the Node. Set it for "cool" or "heat" depending on need. Set temperature as needed.
- Step 6)** To power up the second trailer (Lab), take the flashlight and proceed through the Laboratory module (Lab) to the far end nearest the exit and enter the small doorway to the left.
- Step 7)** Locate the breaker box on the wall to your left, attached to the side of trailer.
- Step 8)** Follow the power-up sequence from the first trailer to power-up this trailer:
- Make sure all of the individual breakers are in the "Off" position.
 - Switch the Main Breaker to the "On" position.
 - Switch each individual breaker to the "On" position.
- Step 9)** Power up the air conditioner by turning on the thermostat located at the upper left front corner of the Node. Set it for "cool" or "heat" depending on need. Set temperature as needed.
- Step 10)** Return to the entrance doorway and store the flashlight in the left front cabinet of the pre-show area so that it can be used after the event to assist in the trailer power-down process.
- Step 11)** At the entrance door, remove the screws from the inside of the half-door. Keep the screws in the bag that is attached to the door so they can be stored with it.
- Step 12)** Remove the half-door and proceed with it through both trailers to the exit door at the end of the Lab module.
- Step 13)** Put the half-door with its attached bag of screws in the storage closet to the right of the exit door.

- Step 14)** The closeout door is bolted in place at the exit. With another staff member standing outside, unbolt the top and bottom of the closeout door. Note: There must be someone outside the door to catch the closeout door, as it will move outwards away from the trailer when it is unbolted.
- Step 15)** Place the closeout door in the storage closet with the half-door from the entrance.
- Step 16)** Return to the pre-show area to activate the Animatron video monitor. The video monitor in with the Animatron is not on the same circuit as the others and must be activated every morning using a separate remote, which resides in the left cabinet in the pre-show area. It is marked "Emily Remote".
- Step 17)** If necessary, the continuous video can be reset during the event by pushing the first button on the left in the line on the front of the Master Events Controller (MEC) in the pre-show area (right cabinet). NOTE: Do not reset the video while the Animatron (Emily) is talking as it unsyncs the Animatron from the audio. However, the Animatron will resync on it's own after one 5.5-minute cycle. The buttons of the MEC are as follows:
- Reset the videos
 - Logo Screen
 - Back Screen
 - Pauses the program
 - Not functional
 - Restart from pause
- Step 18)** Remove the tarp from the wheel chair lifts and store the tarps in the closet near the exit door of the trailer.
- Step 19)** Plug in the wheel chair lifts. Plug cables are attached to the lifts and the attaching plug connectors are under the edge of the trailers. Plug in and twist to lock into place. Test by tugging on connectors.
- Step 20)** Position the wheel chair lifts using the button control box attached to the lifts by a power cable. During the event, the lift at the entrance platform should be placed in the down position, and the one at the exit platform should be at the up position. Both lifts must be operational for wheelchairs to access the trailers. If only one is operational, no visitors in wheelchairs are allowed in the exhibit as the visitor in need may be in the opposite trailer when an emergency arises. There is a buzzer on the entry lift, which is marked for handicapped people requiring assistance to enter the trailers.
- Step 21)** Point out fire extinguishers to first-time staffers. There is a fire extinguisher located at the front of the first trailer at the left side of the curtain as you face into the trailer. A second extinguisher is located inside the front cab area of the second trailer in the storage/work area reserved for the trailer workers.
- Step 22)** Point out breaker boxes to first-time staffers. The breaker box for the first trailer is on the right rear wall of the trailer in the node section. The breaker box for the second trailer is inside the front cab in the area reserved for the trailer workers.
- Step 23)** Point out thermostats to first time staffers and adjust if necessary. The thermostat for the first trailer is on the left of the doorway in the node. The thermostat for the second trailer is inside the front cab in the area reserved for the trailer workers. The AC switch is the one on the right of the thermostat. The units should remain in the AUTO position otherwise increased condensation forms on the vents.

VIEWING

The continuous video is approximately five and a half minutes long per area. This makes the entire show approximately 18 minutes long when you include the 30 seconds between segments.

There is some sound bleed between all areas, so the video volumes may need to be adjusted for the best possible balance.

There is a black audio control box in the front left cabinet in the pre-show area.

Pre-Show area

- Step 1)** For the start of the show, invite up to 15 adults (more will fit if it is a classroom of children) to enter the pre-show area at the entrance door of the trailer exhibit. All other visitors should remain at the bottom of the steps. For safety reasons, no one other than the trailers staff should wait on the entrance platform. The pre-show is a history of the space station and a warm up for what the visitor is about to see. People in wheel chairs and small children should be placed near the front so they can see the monitors more easily. In general it is easiest to allow wheel chair bound individuals to proceed through the trailers first and let others fill in around them.
- Step 2)** When the group is comfortably inside the pre-show area, close the curtain at the entrance and fasten it to the wall of the trailer using the attached Velcro strip. This curtain will block out light and 'street noise', and provide a certain amount of protection from the elements. However, a stiff wind will tend to draw it outward. The pre-show area is sloped and dark when the curtain is drawn, so monitor small children or people who might tend to lean backwards.
- Step 3)** Move to the front of the group as the video begins. The curtain at the front of the pre-show area is an accordion style plastic curtain, which is used to block sound and light between the two areas. This curtain may not always stay shut. The staff member should move from the entrance of the trailer to a position between the two monitors, which will enable them to re-shut the accordion door if necessary.
- Step 4)** As the video segment ends, check to see that the visitors in the Hab module have cleared, and proceed into that area.

Habitation Module

- Step 1)** As visitors enter the Hab, point out to them that the video begins on the first monitor to the left (in with the Animatron), and proceeds sequentially down the module to the last monitor (Also on the left).
- Step 2)** If you have a few minutes, point out the under/over lockers that can be used effectively in space for storage or as a work surface for equipment. The lack of gravity means there is no "up" or "down", as we know it.
- Step 3)** Inform visitors that they may climb inside the sleep restraint or into the shower or toilet facility to get a picture, but time is limited and staffers may have to remind people to continue to the next area.

Connecting Node:

As the group transitions through this node into the Lab Module, an explanation of the ISS connecting node will be helpful. The node is designed as a docking mechanism for the various elements of the space station. Hence, the walkway (floatway) sized windows on every side, which in this case contain pictures of space station crewmembers on orbit.

Laboratory Module:

- Step 1)** Caution visitors to watch their heads as they enter the Laboratory (Lab) Module, as the entry is low.
- Step 2)** Inform visitors that the video begins on the first monitor on the left as you enter the area and proceeds down the module ending with the last monitor on the right.
- Step 3)** Staffers will have to move to the front of the group and be prepared to point out the next to the last monitor as it comes on. This monitor is on the floor of the module and it will go unnoticed if not pointed out.
- Step 4)** After the video ends proceed with the group past the centrifuge at the end of the trailer.
- Step 5)** Inform the visitors that there will be a centrifuge on the space station to study the effects of re-introducing gravity to elements that have been in a near weightless environment (animals, plants, etc.). The "gravity" of the centrifuge can be adjusted to equal the gravity of the Moon, Mars, Earth, etc. However, the ISS centrifuge will not be in the Lab module as it is in this mock-up; it will be separate.

DAILY CLEAN UP PROCEDURE

- Step 1)** Retrieve cleaning supplies (paper towels, Windex, brooms, etc.) stored in the staffing work area at the exit door end of the LAB Module.
- Step 2)** Sweep and spot clean Plexiglas areas in both trailers where needed.
- Step 3)** Return supplies to storage area.

CLOSEDOWN PROCEDURE

- Step 1)** Position both wheelchair lifts up and level with the platforms for the trailer off-duty hours.
- Step 2)** Fold the ramp of the lift up using the button on the wheel chair lift control box (attached to the lift on a power line).
- Step 3)** Cover lifts with tarps that are stored in the cabinet at the exit door of the trailers.
- Step 4)** Unplug both wheelchair lifts. The plugs are underneath the platforms.
- Step 5)** Retrieve the exit closeout door from the storage cabinet at the rear of the Lab Module.
- Step 6)** With the assistance of fellow staff member, place the closeout door on the outside of the exit doorway.
- Step 7)** Bolt the closeout door in place.
- Step 8)** Retrieve the entryway half-door and bag of screws from the storage cabinet by the exit door of the Lab Module.
- Step 9)** Proceed through the trailers to the entrance of the Hab Module.
- Step 10)** Position the half-door in place to secure the entryway and screw it in place.
- Step 11)** Power off the Animatron monitor with the remote marked "Emily remote" located in the left front cabinet in the pre-show area.
- Step 12)** Retrieve the flashlight from its event day storage position in the left front cabinet of the pre-show area.
- Step 13)** Power down the Lab Module trailer at the breaker box in the front cab in the area reserved for the trailer workers. The sequence for the trailer power-down is as follows:
 - Switch each individual breaker to the "Off" position.
 - Switch the Main Breaker to the "Off" position.
- Step 14)** Power down the Hab Module trailer with the breakers located in the cabinet on the right wall of the Connecting Node at the far end of the Hab. The sequence for the trailer power-down is as follows:
 - Switch each individual breaker to the "Off" position.
 - Switch the Main Breaker to the "Off" position.
- Step 15)** Place the flashlight next to the doorway inside the trailer so that it will be available for the start-up crew the next day.
- Step 16)** Exit the trailer via the entryway at the front of the Hab module.
- Step 17)** Release Hab trailer door from doorstop mechanism and close.

Step 18) Close the trailer door and lock it.

IMPORTANT:

Step 19) Release pressure valve to drain the pressure from the air conditioner units. This black valve is located in the smallest belly box under the left side of the Hab module. To release the pressure, gently pull the valve toward you for one to two minutes. You will hear a hissing sound from the valve as the pressure is released. When the hissing sound stops the process is complete.

Step 20) Close the valve (back to its original position).

Step 21) Be sure power source to the trailers is turned off (i.e. generator, switch for AC power, etc.).

RECYCLING THE VIDEO/AUDIO UNITS

Occasionally the video in either unit may become out of sync. The following process will usually correct this:

Step 1) The video units are located in the pre-show area within the right front cabinet if you are facing into the Hab module. Make sure the power strips to the units are turned off.

Step 2) Gently push on the front of the drive to ensure that they are firmly installed within the MPEG player. This will ensure that the drives are securely seated within the units. The MPEG units are the actual video "players" located in the right hand side storage unit of the Pre-Show area. Each player has a disk drive that is located within the right hand side of the unit. The disk drives also have handles, LED's, and locks.

Step 3) Power up the video monitors and Animatron by turning on the 2 power switches on the power strips in the right cabinet in the pre-show area.

EMERGENCY PROCEDURES

In the event of an emergency, one member of the staff should call for the local emergency response officials (i.e. 911, or local emergency response number).

If there is a problem in the trailers, staff members should instruct the group to calmly depart the trailers through the nearest exit. For the Pre-show area and Hab Module this is through the entrance curtain. For the Lab Module this is past the centrifuge area and out the exit door.

In the case of a fire, all persons should stay at least 70 feet away from the trailers and out of the way of emergency personnel.